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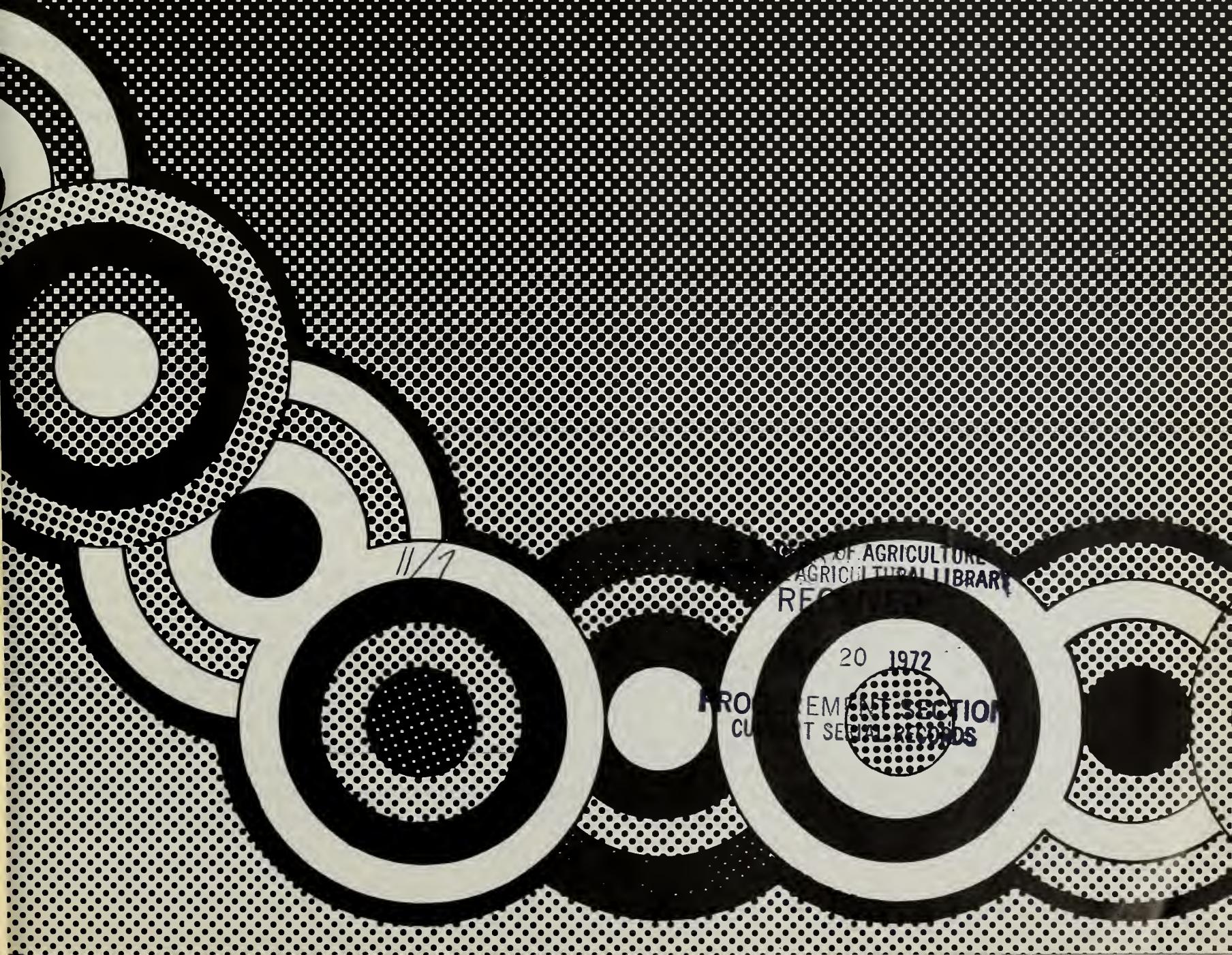
THE FARM INDEX

U. S. Department of Agriculture/July 1972

DC BRANCH

STACKS

The \$130 Billion
Food Assembly Line



Outlook

The economy has warmed up considerably. Output of goods and services rose sharply in the first half of this year, increasing at a 5-percent rate—almost double the 1971 pace.

Business investment has helped the 1972 advance. Buoyed by large corporate profits and a brighter sales picture, new plant and equipment expenditures by industry are running well above a year ago. Inventory investment, slower earlier this year, has begun to perk up but still trails expenditures. Home buying continues at a high level although increasing costs and rising interest rates have become a sobering influence.

Federal expenditures and State and local government outlays have also been expansionary factors. Defense and nondefense Federal spending both have been pushing upward after remaining somewhat level for the past several years.

Consumer confidence has been climbing, despite lingering unemployment and price rises. This should strengthen the demand for food and other consumer products, particularly the higher quality items.

Farmers have benefitted from the strong rise in the economy. Gross cash receipts have been helped mainly by livestock product prices even though beef and poultry supplies continue large. Realized net farm income will reach a record level in 1972—possibly \$2 billion above 1971's \$15.7 billion—notwithstanding competition with non-farm sectors for money, material, and manpower.

The average U.S. cotton farm may plant approximately 50 acres in 1972—about a fifth more than last year. Farm signups in the upland cotton program dropped 9 percent to around 272,000, according to preliminary figures. But total acreage in upland cotton is up significantly. March intentions report showed a 10-percent increase to 13.4 million acres. First acreage estimate is due July 12.

This year's higher prices are giving farmers incentive to plant above their allotments as permitted in the 1970

Agricultural Act. About a fourth of the 1972 average planting per farm represents overplantings. Overplanting is greatest in the Delta and West.

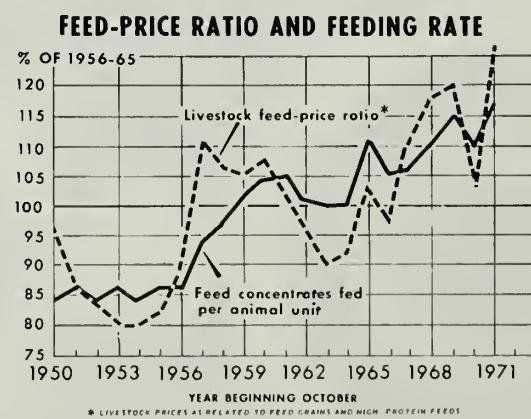
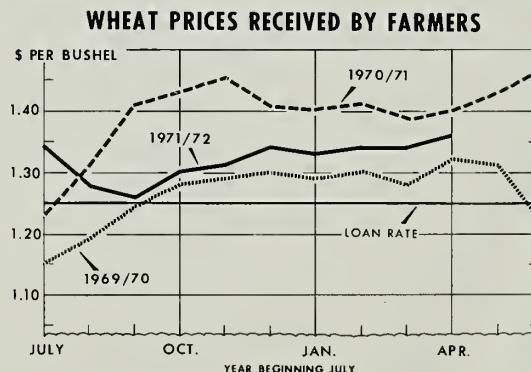
Another large wheat crop is on the way. Output of spring wheat, assuming yields are on trend, could reach 345 million bushels. Together with the indicated winter wheat crop, this would mean a total outturn of around 1.5 billion bushels, compared with last year's 1.64 billion.

"A crop of this size," ERS reported in its May issue of the *Wheat Situation*, "could still have a bearish effect on prices and lead to an increase in carry-out for 1972/73 unless there is a sharp recovery in exports."

Prospects point to bigger soft wheat crops, a marked reduction in hard red spring and durum, and little change in hard red winter.

Supplies for all classes except durum may be larger than in 1971/72. Hard red spring and the soft wheats will show the greatest increase.

Favorable price ratios between livestock and feeds have pushed the feeding rate to a new high. For 1971/72, it's now estimated at 1.6 tons per animal unit, up 6 percent from a year ago and



a shade above the 1960/70 record.

A pickup in corn feeding is more than making up for small reductions in other grains. For the entire feeding year, corn is expected to account for 58 percent of the 189 million tons of all concentrates fed, compared with 55 percent in 1970/71.

Wheat feeding may continue near last year's high level, while declines are likely for grain sorghum, oats, and barley. Feeding of byproduct feeds will probably approach the 34.5 million tons fed in 1970/71.

Use of protein feeds, estimated at 20 million tons, will be off slightly from the previous 2 years, mainly due to the smaller soybean supply. Tonnage of proteins fed in the current feeding year would provide 280 pounds per animal unit, 5 pounds less than last year and 10 pounds below the record feeding rate of 1969/70.

Feed grain carryover from the record-breaking 1971 crop could be the largest in 7 years. ERS estimates next fall's stocks at around 53 million tons—20 million above the previous carryover, but well under the all-time high of 85 million reached in 1961/62.

On the supply side, the current marketing year began with nearly 239 million tons. All but 33 million came from the '71 crop.

Utilization in 1971/72 is placed at 186 million tons, 10-12 million more than a year earlier. Most of the gain reflects heavier livestock feeding. Exports are forecast at 22 million tons, up 8 percent from 1970/71. Sales to Russia accounted for a fifth of our exports for the first 7 months.

"Free" (farmer owned) stocks on April 1 totaled close to 80 million—somewhat short of estimated needs for the domestic market, exports, and "free" stocks at the end of the marketing year. Domestic use plus exports are projected at 73 million tons during April-September. "Free" carryover in recent years has been in the range of 15-20 million tons. Thus, around 10 million tons will have to be withdrawn from Government stocks to meet re-

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quirements, mainly through repayment of 1971 loans.

The corn carryover next October 1 is calculated at 1,250 million bushels, up from 663 million a year earlier. Some 200-300 million bushels will have to come out of loan to allow for the normal "free" carryover of 300-400 million.

Sorghum's carryover into 1972/73 will increase to around 200 million bushels, double that on October 1, 1971. Government holdings of grain sorghum will not be heavily drawn on to take care of April-September needs.

Few oats will be needed from loan to satisfy market requirements. This assumes a "free" carryover on July 1 of around 160 million bushels out of a total carryover of 540 million.

July 1 stocks of barley are projected at approximately 160 million bushels, about the same as a year ago.

Foreign Spotlight: Canada eyes Far East market for feeds.

Representatives of the Canadian grain industry—during a recent trade mission to Japan, South Korea, Taiwan, and Hong Kong—found these countries to be good potential outlets for Canadian prepared feedstuffs and other livestock feeds. (Canada presently exports negligible amounts of prepared feedstuffs.)

In the case of South Korea, sales of Canadian feed grains will be possible only if the Canadians can compete with corn from the U.S.

Half the U.S. corn exports to South Korea are for cash and half on credit, under P.L. 480. So far, Canada has not exported any feed grains on credit, but representatives of the grain sector are hopeful that credit terms can be arranged.

In a related development, the Canadians will help South Korea start a trial project aimed at converting the South Korean poultry industry to the use of Canadian barley. Corn from the U.S. is now the major ingredient of poultry feed in South Korea. U.S. sales of corn to South Korea averaged 357,000 metric tons in 1970-71. Feed trials using Canadian rapeseed meal are also to be started.

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Contents of this magazine may be reprinted without permission. They are based on research of the Economic Research Service and on studies done in cooperation with State agricultural experiment stations. Use of funds for printing this publication approved by Director of the Bureau of the Budget, May 24, 1972. Subscription price: \$2 yearly (\$2.50 foreign). Single copies 25 cents. Order from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

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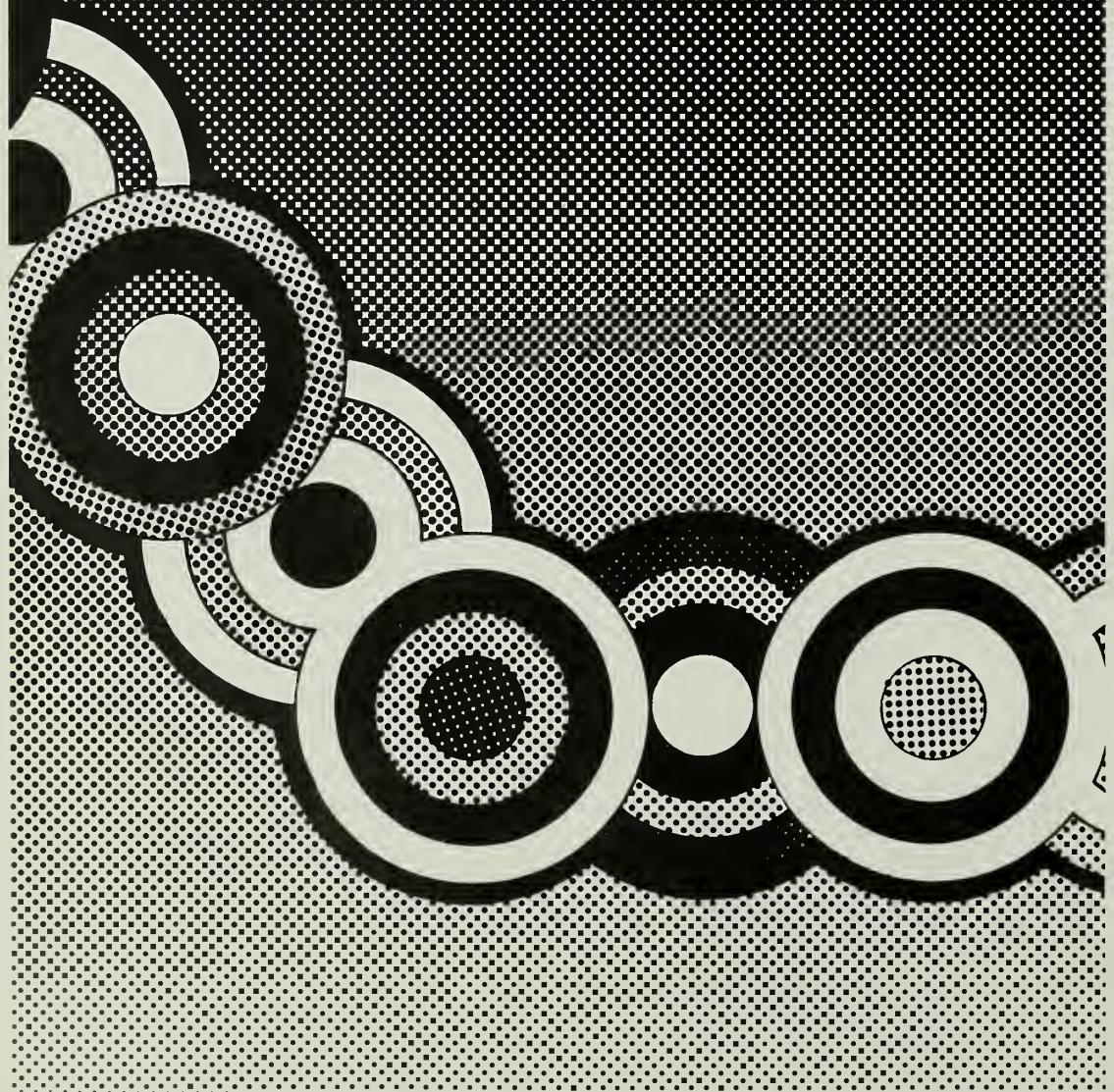
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The Farm Index is published monthly by the Economic Research Service, U.S. Department of Agriculture. July 1972. Vol. XI. No. 7.

The \$130 billion food assembly line



The \$130 billion food assembly line—our Nation's biggest business—is set in motion by some 4.3 million people who work the land to supply its raw materials.

Every year, about 1,500 pounds of food per person roll off the Nation's biggest assembly line—the one that spans from farmer to consumer. Its total goods and services are valued at \$130 billion.

The assembly line runs through processors, wholesalers, restaurants and supermarkets. Its output includes meat, poultry, seafood, vegetables, fruit, cereals, and dairy products.

About 1.3 billion acres of land, and the 4.3 million people who work it, supply the raw materials.

In a single year, farmers and ranchers furnish the assembly line about 11 million sheep and lambs . . . 39 million beef cattle and calves . . . 94 million hogs . . . 120 million turkeys . . . 3 billion broilers . . . 72 billion eggs . . . and 115 billion pounds of milk.

In all, the Nation's farmers market over \$50 billion worth of agricultural goods annually. Some \$35 billion is food products for U.S. consumers. More than \$4 billion is shipped to consumers overseas.

Behind this outpouring of food products stand some 3.3 million farm people and 1 million hired workers. Add to this about 2 million other people who work in industries that supply goods and services to farmers.

Farmers invest more than \$40 billion annually in machines, fertilizers, chemicals, animal feeds, petroleum products, interest on loans, labor, and a host of other goods and services.

These goods and services, as well as better farming methods, new plant varieties, and improved livestock and poultry breeds, have accelerated farm production. Today, each farm worker produces enough for nearly 50 people, compared with about 28 just 10 years ago.

About 1 million firms that grade, store, process, manufacture, package, and distribute foods await the farm-

ers' raw products. Services provided by this marketing system ultimately make up \$2 of every \$3 consumers spend for food.

First stop along the assembly line is often a country grain elevator, cold storage warehouse, or a stock-yard. These businesses number about 10,000.

Most foods then travel through one or more of the 23,000 food processing plants located across the country. These firms employ around 1.5 million people. Food processors, like farmers, have become increasingly efficient.

Food brokers, wholesalers, food stores, and other buyers transfer food products on to the next point in the assembly line. A massive network of farm-to-market roads, highways, railroads, waterways, and air carriers link the various stops en route to consumers.

At the end of the \$130 billion food assembly line are approximately 300,000 retail food stores staffed by nearly 1.75 million employees. Large, modern supermarkets stock hundreds of new products every year, and discontinue others when consumer appeal wanes. Typical supermarkets offer consumers nearly 8,000 items.

The assembly line also ends at more than half a million restaurants and other away-from-home eating places. These are operated by some 3 million workers.

One in every seven workers—including farmers, waiters, processors, truckers, and grocery clerks—makes his living on the food assembly line. With 13 million employees, the food assembly line is the Nation's biggest business, accounting for more than one-tenth of the total value of goods and services produced in the United States. (1)

TO GET A SLIDE SET of the \$130 Billion Food Assembly Line, write Photo Division, Office of Information, USDA, Wash., D.C. 20250. Price is \$13 (47 frames). Film strip is available for \$5.50 from Photo Laboratory, Inc., 3825 Georgia Ave., N.W., Wash., D.C. 20011. A tape cassette with music/narration is available from either source for \$3.

Cost of Irrigating Pastures Probed in Colorado Study

Just how much does it cost to irrigate pasture?

For farmers in northeast Colorado, a new study estimates capital investment at \$353 an acre for a 135-acre pasture . . . annual operating costs at \$66 an acre . . . and fixed costs at \$31 an acre. These figures are based on records kept by farmers in four counties.

Beef produced from irrigated pasture average 576 pounds an acre for yearlings and 363 pounds an acre for calves.

The study, by Colorado State University and ERS, was sparked by the considerable interest in irrigated pasture in the State following the advent of sprinkler irrigation systems. Some 60,000 acres of pasture were irrigated last year, twice as many as in 1968 and 1969. Most of the irrigation is with center pivot sprinkler systems.

Better than half the capital investment of \$47,600 for the 135 irrigated acres was for the well, pump and motor, and sprinkler. Other costs included fencing, stock water system, establishing pasture, and land investment. Total investment may vary widely from the average, depending mainly on well depth, make of sprinkler system, and land values.

The Farmer's Cut

The farmer got 40¢ of every dollar consumers spent on farm foods in the first quarter of 1972.

This was a cent more than in the previous quarter, and 2 cents more than a year earlier. In March, however, the farmer's share dropped back to 39¢ as a result of falling farm prices.

Over the past decade, the farmer's quarterly shares ranged from 36¢ to 42¢. Two-thirds of the time they averaged under 40¢. Only in six quarters did the share rise above 40¢.

Going back to 1951 the farmer got 49¢ of the consumer's food dollar. (8)

The study noted several advantageous management techniques that might be considered for irrigated pasture:

- Use a soil probe. Grass color is not adequate for determining when irrigation is needed. Many pastures go dormant due to under-irrigation in August and September.

- Apply sufficient water. Very light irrigation—of $\frac{1}{2}$ to $\frac{3}{4}$ of an inch—does little more than wet the top 3 inches.

- Irrigate or pre-irrigate to the maximum depth in early spring when vegetation growth is maximum, soil is crumbly, and evaporation is lowest.

- Do some land smoothing before the grass is seeded. Otherwise, except on sandy soils, water collects in low areas.

- Operate the system at the highest pressure consistent with pipe diameter and nozzle sizes. (2)

Demand Waxes for Large Farm Mortgage Loans

Demand is ballooning for "large" farm mortgage loans, those for \$250,000 and over.

In surveys of recordings for the first six months of the year in 1,700 agricultural counties, ERS found that the total dollar amount of these large loans rose 37 percent between 1969 and 1971 to \$360 million. They also accounted for a growing proportion of all new farm mortgage loans recorded during the 6-month period—14 percent in 1971 versus 12 percent 2 years earlier.

Life insurance companies last year made 34 percent of their dollar amount of farm mortgage loans in the \$250,000-and-up category. Thirty-three percent of the loans from individuals and miscellaneous lenders were large loans. Production credit associations had 25 percent. Large loans by three lenders—Federal land banks, commercial banks, and savings and loan associations—ranged from 7 to 10 percent.

Compared with mortgage loans under \$250,000, the large ones carried slightly higher interest rates

and shorter terms of repayment. This was true in the 1967, 1969, and 1971 survey periods:

	Interest (percent)	Term (years)	Avg. size (\$1,000)
1971			
Under			
\$250,000	7.38	17.6	27
Over			
\$250,000	7.74	15.1	519
1969			
Under			
\$250,000	6.80	18.2	24
Over			
\$250,000	6.99	15.5	507
1967			
Under			
\$250,000	6.07	18.6	20
Over			
\$250,000	6.25	16.4	511

The biggest portion of these large loans was in the Mountain States. These eight States, with only 8 percent of the U.S. total value of agricultural land and buildings, recorded 28 percent of the total dollar amount for large loans. Only 11 percent was in the five Corn Belt States, which have 23 percent of the total U.S. value of land and buildings.

By type of farming area, over one-third of the large loan volume turned up in the livestock areas from western Texas to Montana. Also important were cotton areas from South Carolina to Texas, with nearly one-fourth of the large loan transactions.

Since 1967, the portion of large loans found in some types of farming areas has increased significantly. Those found in the livestock areas increased 8 percentage points, the Corn Belt areas 6 points, and the dairy areas 4 points.

As to the uses of borrowed funds, ERS reports they are by no means confined to the purchase of farmland. In some cases the funds are used for development of existing owned land, for construction of improvements, or to secure funds for nonfarm uses.

These loans may not even represent additional money to the bor-

rower. Frequently, they're used to consolidate short-term debts, to refinance existing real estate mortgages, or, in some instances the mortgage is recorded solely as supplemental security for existing short-term debts. (6)

Farmers Set Alltime High For Crop Insurance in '71

A record \$4.6-billion worth of insurance protected farmers against losses to growing crops last year.

ERS reports that for this crop insurance, farmers paid \$178 million in premiums and collected \$124 million in indemnities.

The bulk of the indemnities—nearly \$95 million worth—were paid by private insurance companies for hail damage. This was a record high—due to increased insurance coverage and heavier than usual storm damage.

The remaining \$29 million in indemnities was paid by the Federal Crop Insurance Corporation (FCIC) for all-risk policies that cover losses from such causes as drought, excessive moisture, freeze, hail, insects, and disease.

However, FCIC's indemnities were lower than usual—representing only 60 percent of premiums paid by growers, compared to the 97-percent average loss over 1948-70. This was partly because of the record insurance on corn last year as protection against blight damage, which proved insignificant. Other major crops, too, showed a low loss ratio last year. Wheat's loss ratio was 42 percent; tobacco, 39 percent; oats, 25 percent; and barley, 30 percent.

Although crop insurance is widely available, it is most heavily used where crops are important and production hazards are relatively great. Corn, wheat, soybeans, tobacco, and cotton account for the bulk of insurance, although some minor crops are also insured.

Nearly half of all protection in the U.S. in 1971 was in the Corn Belt. About 15 percent was in the North-

ern Plains, and about 10 percent each in the Lake States and Appalachian regions.

Iowa led all States in premium expenditures with \$28 million. Illinois was second, at \$17 million, followed by North Dakota, \$15 million; Minnesota, \$14 million; Nebraska, \$13 million; and North Carolina and Kansas, \$11 million each.

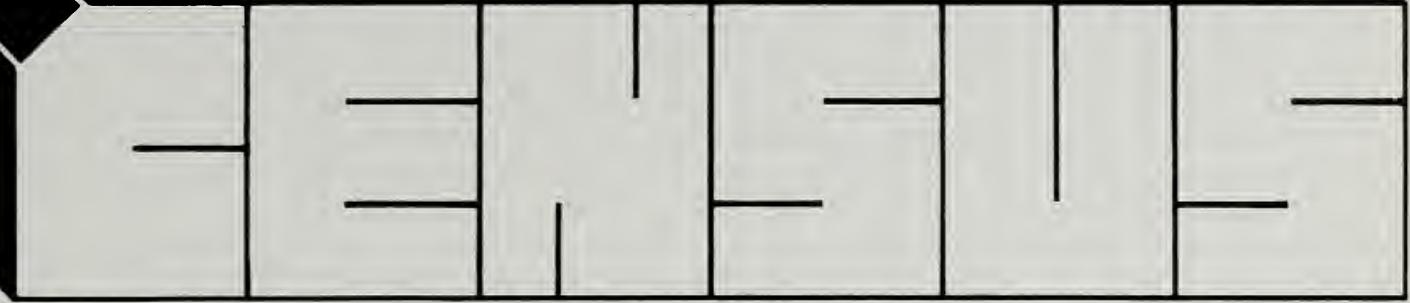
Over a period of time, the indemnities paid growers are heaviest in areas where premiums are largest, although this fluctuates from year to year depending mainly on weather. Iowa received the most indemnities last year—\$21 million—followed by Illinois, \$12 million; Minnesota, \$11 million; Kansas, \$10 million; North Dakota, \$8 million; Texas, \$7 million; and Nebraska and North Carolina, \$5 million each.

Indemnities paid by private crop-hail insurance companies last year exceeded premiums in ten States. South Carolina had a loss ratio of 148 percent, and Kentucky 129 percent. Both these States are heavily insured on tobacco. Kansas and Oklahoma, important wheat States, were hard hit by hail and had loss ratios of 120 percent each.

For FCIC the largest indemnities for any crop last year were paid on cotton—\$6.4 million. The loss ratio was 169 percent, and 1971 was the sixth year in a row that indemnities exceeded premiums on cotton. Indemnities were heaviest in Texas and California.

Texas' losses were due primarily to drought, excessive moisture, and late freeze in various sections, while California's were caused by delayed planting and subsequent heat damage in one area and early frost in another. In Mississippi, loss was due to excessive moisture, and in South Carolina, to hail as well as excessive moisture.

Other large FCIC indemnities were paid in Virginia and North Carolina where Hurricane Ginger brought heavy rains at peanut harvest time, and in the Carolinas where a severe freeze caused heavy apple and peach losses. (5)



One of the surest bets you could wager about the 1969 Census of Agriculture is that the arrow showing farm numbers would point downward.

In fact, the final figures reveal that between 1964 and 1969 farm numbers descended 13 percent to 2.7 million. Predictably too, farm product sales swelled—by 29 percent to almost \$46 billion.

Other highlights:

About two-thirds of our farms, those with annual sales of \$2,500 and up, accounted for 98 percent of total sales in 1969.

California led in marketings with \$3.9 billion. Next, in billions, were Iowa (\$3.7), Texas (\$3.3), Illinois (\$2.6), and Nebraska (\$2.2).

Most farms (85 percent) were operated as sole proprietorships, and they controlled 72 percent of the 81 million acres in farms.

Partnerships, second most prevalent form of business organization,

had 13 percent of the farms and 18 percent of the land. They were fairly evenly distributed among the 10 production regions.

Some 1.1 percent of the farms (22,000) with around 9 percent of the land were operated by corporations. Only 0.1 or 1/10 percent of farms—and 1.6 percent of the land—were controlled by corporations with more than 10 shareholders. They represented only 3 percent (\$1.3 billion) of total farm product sales.

Regionally, farm corporations were most numerous in the Southeast, the Mountain States, and Pacific States. The fewest number of corporations were in the Lake States, the Corn Belt, and the Northern Plains.

By sales classes, the sharpest increase since 1964 came in the proportion of farms selling products valued at \$60,000 and over. The number of these farms increased 64 percent in 1964-69 to 118,000, though

still accounting for just 4 percent of all farms.

The largest decline was in the less-than-\$2,500 sales class. They dropped 26 percent to 994,000 farms, but continued to account for about a third of total farm numbers.

By tenure group, fully-owned farms represented roughly two-thirds of the 2.7 million in 1969, a slightly bigger share than in 1964. Part-owned and part-rented farms, with 25 percent, showed no change, whereas tenant farms dropped somewhat to 13 percent. (4)

NOTE: Data from the Census of Agriculture on number of farms and value of sales are available for Census years only. USDA estimates and publishes annual series that are based in part on Census of Agriculture data benchmarks. The published USDA estimates for '69 are generally somewhat higher than what the Census shows. The USDA estimates since 1964 will be re-examined in light of the 1969 Census data and revisions will be made where necessary.

Texas Gins Up Outturn, Slash Costs

Texas cotton gins upped their 1970-71 average volume of output from a year earlier while cutting down on ginning costs.

An ERS study of 42 West Texas plants found they turned out nearly 255,000 bales in 1970-71, or 22 percent more than in the previous season.

Average volume of cotton handled showed increases ranging from 10

percent for group 1 gins (capacity of 8 bales or less per hour) to 53 percent for group 2 (9-11 bales per hour).

The rate of gin capacity utilization for all groups combined rose 9 percent over the previous year. The 49-percent rate of utilization was the highest since 1965-66.

Total gin costs per bale declined in 1970-71 for all size groups. The average was \$24.07 per bale, a decrease of \$2.82 from 1969-70.

Group 2 had the greatest increase in average rate of capacity utiliza-

tion, and also showed the greatest reduction in total cost—from \$29.27 per bale for 1969-70 to \$23.29 for 1970-71.

Out-of-pocket costs ranged from \$18.02 per bale for group 4 gins (capacity of 21 bales or more per hour) to \$22.70 per bale for group 1. The drop in average out-of-pocket costs from 1969-70 to 1970-71 came to \$1.65 per bale for all groups combined. The greatest cost reduction was for labor (down 54¢ per bale) followed by management (down 39¢) and repairs (down 25¢). (3)

Survey Provides Closeup View of Feed Industry

When it teamed with the Agricultural Stabilization and Conservation Service (ASCS) for the first comprehensive survey of the formula feed industry, ERS found some 13,000 feed mixing operations in the U.S., of which nearly 8,000 produced more than 1,000 tons of formula feed in 1969.

Employment in these 8,000 firms totaled nearly 65,000 early that year. The Corn Belt was the biggest regional employer, hiring close to 18,000. Texas led all the States with about 5,700 employees, followed closely by Iowa with around 5,100.

The same States also led in number of feed mixing establishments. But Iowa captured top spot in this category with more than 700 establishments, compared with Texas' 438.

The State and regional breakdown of the Nation's formula feed businesses also included data on the kinds and quantities of ingredients used. Nationwide, feed manufacturers mixed more than 32 million tons of corn, sorghum, barley, oats, and wheat.

Corn is the primary ingredient. In 1969, about 105 million tons of corn were fed to livestock. Of this, about 20 million tons—roughly a fifth of the total corn fed—were processed by feed manufacturing firms.

Grain sorghum ranks next in importance. Feed milling firms processed a little over 7½ million of the 20 million tons fed to livestock.

In addition to grains, feed manufacturers used more than 12½ million tons of other ingredients, including high proteins, fats, molasses, sugar, alfalfa, vitamins, minerals, and urea.

Combined weekly capacity of all firms that produce more than 1,000 tons annually was close to 3 million tons of feed—in meal, pellets, or block form.

The Corn Belt had the highest rated weekly capacity for all forms of feed, with close to 760,000 tons—

more than three times the Northeast's capacity, and roughly a fourth of the national weekly capacity.

The joint ERS-ASCS survey gathered information on inshipments of individual feed ingredients to formula feed establishments, as well as outshipments of the finished products. Data—which are assembled by State and region—include quantities, average distance shipped, and mode of transportation.

For example, some 23,000 tons of feed ingredients were shipped by barge to Oklahoma milling firms in 1969 . . . molasses had to be shipped an average of 277 miles to feed manufacturers in the Southeast.

Such information is vital to ASCS, the USDA agency responsible for distributing feeds and ingredients if normal supply channels are disrupted. (7)

Herbicide Restrictions Trim Grain Farm Returns

If the use of herbicides were restricted in Nebraska, grain farmers probably wouldn't change their cropping patterns very much. But net returns from grain crops would decline on those farms dependent on herbicides to control weeds.

These findings emerge from an ERS investigation of the potential impacts of three herbicide use practices on Nebraska cash-grain farms. Main crops on hypothetical farms of 400 and 640 acres were corn, grain sorghum, soybeans, and wheat.

Farms of both sizes in two regions—dryland and irrigated—were programmed. This provided the chance to compare the herbicide practices' impact on farms of different sizes within a region and farms of the same size in different regions.

Three alternative practices were considered for herbicide use:

- herbicides applied preemergence in a band at recommended rates, with cultivation between rows—a commonly used practice.
- postemergence herbicides used in place of preemergence materials, which would be restricted; and

- exclusive use of cultivation to control weeds, in the event of a total ban on herbicides.

Weather conditions at cultivation time were recognized as crucial factors in measuring the impacts of each practice. Thus, researchers analyzed weather data spanning the 10 previous years to determine the percentage of field time available for cultivation in both regions. Crop yields were adjusted accordingly.

Other considerations, such as machinery requirements and commodity prices, were established at the start of the study and assumed constant through the changing levels of herbicide use.

Cropping patterns were found to be similar on all the farms. Corn and grain sorghum dominated when preemergent herbicides were used, and when the postemergent herbicides took the place of the preemergents. With a ban on all herbicides, farmers included wheat in their cropping plans. Wheat was grown because corn and grain sorghum yields declined to the point where they brought lower returns per acre than wheat.

On the dryland farms, labor requirements accelerated as herbicide use policies became more stringent. Conversely, total labor needed on the irrigated farms remained fairly constant through all the herbicide use practices. Hired labor was not needed, except for 6 hours on the larger irrigated farm when post-emergent materials were used.

On all the hypothetical farms, net returns to the operator's labor and management were highest when pre-emergent herbicides were allowed. Net returns ranged from a high of \$7,700 on the 640-acre irrigated farm to around \$1,900 on the smaller dryland farm.

When postemergent materials were applied, net returns to the larger irrigated farm toppled to \$1,160. On the 400-acre irrigated farm, net returns dropped from \$4,700 to \$1,700. Dryland farms showed no net return. And when cultivation was the only form of weed control, all hypothetical farms lost money. (9)

YOUR FIRST •R.E.S.O.R.T.



Before deciding to build your first resort, consider these cost estimates gathered in Wisconsin, whose resort industry adds millions to rural economies.

So you've got some spare cash and you're looking for investment opportunities, preferably something in the recreation line.

A new study by the University of Wisconsin, in cooperation with ERS, doesn't say what you can expect to make in the resort business. It does, though, give a rough idea of the capital it takes to set one up and keep it going.

Wisconsin, by the way, is no tyro in the outdoor recreation game. The

State's income from this industry adds up to over \$1 billion a year, with a good share of that income made by some 3,800 resorts.

The planning guide worked up by the University economists contains estimates of capital investments and operating costs for six kinds of resort complexes popular in the Badger State. The cost figures are for resorts established a few years back. For an updating, add at least 10 percent to allow for the rise in costs of materials and services.

For example, the guide shows it would cost about \$57,000 to put up the simplest resort—two-bedroom cottages with a 12-guest capacity for the summer season.

At the upper extreme, you could

invest upwards of a half million on a year-round resort with lodge accommodations for over 200 guests.

Here's what you would have gotten if you invested the \$57,000 in the smaller resort:

✓ The land, including cost of development.

✓ Water and sewer system.

✓ Three furnished chalet cottages (20' x 20') with two bedrooms, living room, kitchen, loft, and front deck.

✓ A dwelling for the manager.

✓ Basic facilities for outdoor recreation, such as a small boat for each cottage, fishing equipment, and picnic tables.

Total operating costs for the 12-week season came to \$14,000—for

depreciation, interest, taxes, advertising, insurance, utilities, supplies, and maintenance.

Another \$21,000 would buy a 36-seat restaurant with an annual operating cost of \$12,000. A small swimming pool would run \$6,300 and operating costs, \$900.

Had you opted for the larger resort complex, the price tag would have increased to around \$540,000. The operating cost for 12 months: \$173,000. The land was included along with the basic facilities, the major expense being the lodge with a guest capacity of 216. You could have added a 108-seat restaurant (for \$64,000 plus \$87,000 to operate it), golf course (for \$50,000 plus \$10,000 to maintain it), and five snowmobiles (\$3,200).

Economies of scale are possible in the resort business as in most ventures. For instance, the larger resort saves almost 50 percent on the initial investment—measured on a per guest basis—over the 12-guest resort. In operating costs, the per guest saving is about 30 percent.

Extending the operating season is one way to reduce the per-guest investment. This can be done at a relatively low cost—about \$600 to winterize the smaller resort cottages to make them livable in all seasons.

The resort's income potential would naturally need to be considered when deciding which of the many arrangements would yield the highest return per dollar invested. A worksheet for estimating total revenues is included in this report, along with investment and operating cost tables for the six classes of resorts at varying levels of guest capacity. (10)

Most Poor Quality Homes Found in Rural Areas

In the jargon of a real estate salesman, "a handyman's delight" is a house that needs more than paint to make it livable. Rural America has plenty of such dwellings.

The summary report on the 1970 Census of Housing says the Nation then had nearly 68 million housing

Cramped Quarters

When the census takers ask how many rooms your house has, they're mainly interested in knowing how crowded you are.

For census purposes, a house is listed as "overcrowded" if there's more than one occupant for each room in the dwelling. The Nation's latest housing survey found 5.2 million units in this category, or 8 percent of all occupied dwellings. These were considered too small to meet the minimum space needs of the inhabitants.

Overcrowding was slightly more prevalent among rural (about 9 percent) than urban housing (less than 8 percent).

Geographically, housing size was least adequate in the South. Rural areas of this region had a greater proportion of overcrowded units—11 percent compared with 9 percent in the standard metropolitan areas. (13)

units. More than 5 million were vacant but potentially livable once necessary repairs are made. Over half of them were situated outside our Standard Metropolitan Statistical Areas (SMSA's).

Another 3.8 million units were lived in even though they lacked complete plumbing (hot and cold water piped inside, a flush toilet, and a bath or shower for exclusive use of the occupants). Of the 3.8 million, nearly two-thirds were outside the SMSA's. These nonmetropolitan areas, however, contained less than one-third of all the housing units in the Nation.

In short, most of the poorer quality housing is in rural America.

Lack of plumbing, according to the 1970 Census, was more common in homes occupied by blacks than by whites. In the predominantly rural areas of the South, nearly half the black housing didn't have complete plumbing.

The 1970 Census also found that—Homeownership continued to be more prevalent in rural areas than urban areas. Among blacks, the percent of ownership was only two-

thirds as great as among whites.

Single-family units were far more prevalent outside the metropolitan areas. Mobile homes and trailers made up less than 3 percent of the occupied units, but over half were located outside the SMSA's.

Multi-unit housing was far more common in the urban areas than in rural. More than one-third of the Nation's SMSA housing was in multi-unit structures, compared to one-seventh of the housing outside the SMSA's. Multi-unit housing in the non-SMSA's was least common in the South—only 9 percent—and most prevalent in the Northeast.

The median, or mid-point, value of all owner-occupied dwellings was \$17,000. Low value housing made up a greater share of the total in non-SMSA's (units valued at less than \$5,000)—14 percent, compared with only 3 percent in the SMSA's.

The Census noted that housing values tended to be lowest in the South and highest in the West and Northeast. The median value of rural housing ranged from \$10,500 in the South to \$16,300 in the Northeast. Among SMSA housing, the median value again was lowest in the South but highest in the West.

Low-rent housing was also most prevalent outside the SMSA's and in the South. Median cash rent in the SMSA's was nearly twice that outside the SMSA's. Nearly half the rented housing in the South was leased for less than \$40 a month.

In 1970, there were 1.3 million occupied rental units for which no cash rent was being paid. More than half of this housing was located outside the SMSA's, with three-fifths in the South. (12)



A Benefit of New Industry: Jobs for Rural Poor

When industry locates or expands in a predominantly poor rural area, who gets the new jobs?

Is it the local poor who benefit, or local residents who switch to better-paying jobs, or is it newcomers who benefit most? Do the new jobs really help bring the poor out of poverty?

These were the types of questions ERS set out to answer in a study of four rural areas where industry is expanding—northeast Arizona, southern Appalachia, central Ozarks, and the Mississippi Delta in Arkansas. All these areas contain many employable poor people.

The study found that most of the new jobs were held by local residents. Newcomers to the areas and persons returning to it each held about a tenth of the new jobs.

About 1 in 4 of the new jobs in surveyed plants was filled by persons who were poor when hired. Of these, two-thirds escaped poverty.

On the average, the new employees increased their income by \$20 a week, but this varied greatly by region. In many cases, a second wage earner was needed in a household to bring it out of poverty. (The poverty threshold in the study was defined as \$2,000 for the first household member—the employee—plus \$600 for each additional member of the household.)

Over a lifetime, the new jobs would add nearly \$13,000 to each employee's income over what he would have earned in his old job.

The new plants drew employees from a wide area. While almost 40 percent lived within 4 miles of the plant, another 40 percent lived 10 miles or farther from the plant, and a number commuted more than 40 miles one way.

It thus appeared that the labor market for new and expanded plants within developing areas was spacially quite extensive and that both urban and rural residents participated in job development. (14)



Men and Milestones

En Route Hankow to Shanghai, China, June 2, 1918—USDA Plant Explorer Frank N. Meyer drowns in the Yangtze River.

Frank Meyer was so private a man that little is known about him prior to 1905 when the Department of Agriculture's Office of Foreign Seed and Plant Introduction hired him to search in China for new plants of possible use to American growers.

He was born in Holland, served as head gardener under the Dutch geneticist Hugo De Vries and then worked in several American greenhouses.

But basically Meyer was a wanderer with an exceptional eye for flora. For most of the years between 1905 and his death in 1918, he travelled in China, Mongolia, Turkestan, and Manchuria sending back hundreds of new plant varieties. From his first trip alone he netted over 1,200 specimens.

His accomplishments marked Meyer as one of the most outstanding American plant ex-

plorers of this century.

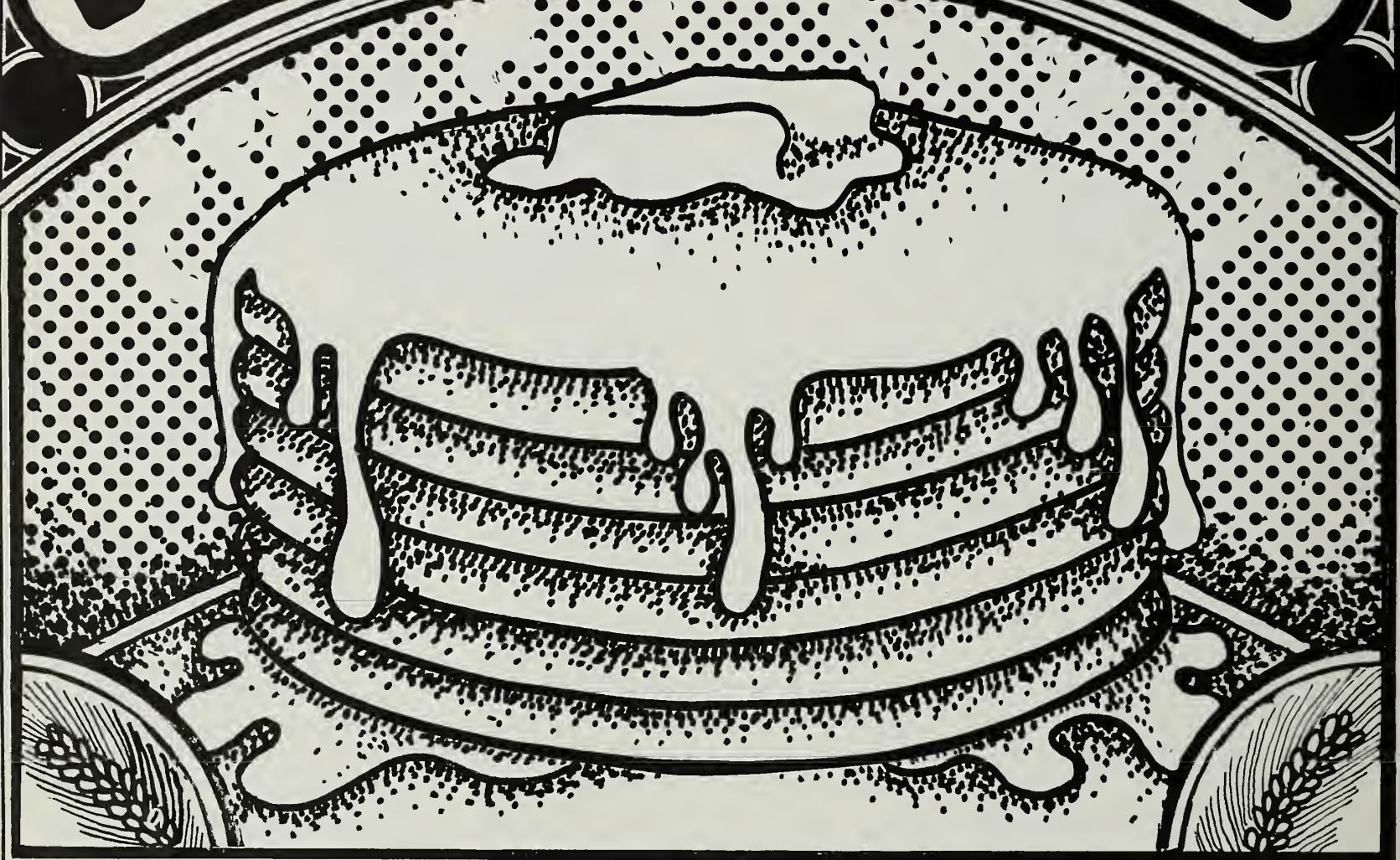
He was also one of the most abused, thanks to his habit of going to unsettled areas where few foreigners—let alone Westerners—were ever seen.

Thugs attacked him in Harbin, soldiers threatened him in Kansu. He negotiated past suspicious guards on the China-Siberia border, and at the time of his death he was escaping Ichang where the Chinese revolution had kept him isolated for months.

Journeying much of the time on foot, he brought out ornamental and food plants such as early flowering cherries, seedless persimmons, odorless cabbage, blight-resistant pears, and alfalfa types suitable for dry and alkalai soils.

His greatest find was the Siberian elm which flourishes on the American plains where the New England elm would die from cold or drought. Those who enjoy its shade owe thanks to Frank Meyer who today lies buried in China. (15)

BUCKWHEAT REVIVAL



Buckwheat, a crop which appeared to be going the way of the horse and buggy, has enjoyed a resurgence in popularity in the 1970's, thanks to the American consumer.

If the smell of buckwheat cakes wafts through your house on Sunday morning, or buckwheat groats are turning upon your plate in place of rice, you're probably part of the buckwheat revival.

Buckwheat's never been a terribly important grain (actually, it's not even a true grain), but when it was at its peak here in 1866, production

reached 22 million bushels. Demand, however, steadily fell off as breakfast habits changed and as farmers found other feed crops more satisfactory. By 1969, buckwheat production had reached a record low of less than three-quarters of a million bushels.

But the advent of the 1970's saw an upsurge in buckwheat consumption. The cause is twofold: new buckwheat products such as ready-to-eat cereal plus increased interest in "natural" foods. As a "natural" food, buckwheat rates high in nutritional value, equal or above many

other cereals or seeds.

Today, you'll find buckwheat groats and straight buckwheat flour displayed prominently among the "natural" foods—while not many years ago it was hidden in an obscure corner in stores.

Buckwheat pancake mix continues as the most popular food use of buckwheat and contains about 40 percent buckwheat flour in addition to wheat and other flours. Most recently, there's been the introduction of ready-to-eat buckwheat cereal.

In fact, buckwheat has been doing so well in the seventies that domes-

tic production can't keep up with demand, necessitating large imports.

However, the solution to the production problem is not as simple as planting additional acreage.

Buckwheat faces stiff competition for acreage from other crops, and at present, can't really compete in terms of income to farmers.

Its yield-per-acre hasn't changed much in 20 years while corn's has gone up 100 percent, wheat's 80 percent, and oats—one of buckwheat's main competitors for acreage, nearly 70 percent. Thus, farmers can get far greater yield, and often far more money, from other crops.

And because of the nature of the plant—it's cross-pollinated and can't be inbred—it is not well adapted to plant breeding research. But without increased research efforts, the yield-per-acre standstill probably won't be overcome.

Now, buckwheat is often planted only after the farmer has failed in his efforts to plant other crops. To get enough buckwheat at reasonable prices, some buyers contract acreage.

In the past 20 years, U.S. buckwheat production fell from 4.4 million bushels (1950) to 678,000 bushels (1969). Acreage has dipped from 253,000 acres to 39,000.

Historically, the leading buckwheat States have been New York, Pennsylvania, Michigan, and Wisconsin.

While New York continues to be first, its production has dropped from 1.5 million bushels in 1950 to 216,000 in 1969. Harvested area shrank from more than 70,000 to 14,000 acres.

Meanwhile, Pennsylvania's production has dropped even more dramatically. It's gone down from 1.1 million bushels to 98,000, and acreage has plummeted from 59,000 to 4,000.

Replacing Pennsylvania as the No. 2 buckwheat State is Minnesota, which has held its acreage at about a third of the 1950 level. It produced 166,000 bushels on 9,000 acres in 1969.

Meanwhile, North Dakota has moved up to become the fourth largest buckwheat State, with 93,000

Buckwheat Backgrounder

Though buckwheat originated in Central Asia, it's been grown in America since colonial times.

Primarily used for buckwheat pancakes and as a livestock feed through the years, its popularity almost came to an end in the 1960's with our tendency to eat less starchy foods and ones without such a strong flavor as buckwheat. In addition, modern farm machinery permitted quicker planting of other crops, meaning farmers are less dependent on quick-maturing crops like buckwheat.

With buckwheat's revival in the 1970's has come other uses for this nutritious food.

Buckwheat flour can not only be used for pancakes, but in breads and other baked goods to add a darker color.

Buckwheat groats—the hulled kernel—can be used as a substitute for rice and as a stuffing for turkey or chicken.

Groats can be marketed whole, cracked, or as a coarse granular product. It's also used for breakfast food, porridge, and as a thickener for soups, gravies, and dressings. (17)

bushels on 5,000 acres in 1969.

Acreage in Michigan and Wisconsin has all but disappeared.

Import duties on buckwheat have gradually been reduced to zero. Last year, about 156,000 bushels of buckwheat were imported from Canada, compared to 27,000 bushels the year before. During the first three months of 1972, more than 100,000 bushels had been brought in. (16)

Strawberries a Favorite On Two Continents

Izaak Walton, the noted English writer, once said of strawberries in the 1600's, "Doubtless God could make a better berry, but he never did."

Since Walton's time, man has greatly improved upon the quality, appearance, and size of the indigenous strawberry. And, in the U.S. the average yield per acre has more

than doubled since 1950 through better plant spacing, disease treatment prior to planting, higher use of irrigation and fertilizer, and the development of high-yielding varieties.

Cultivation of the strawberry began in Europe during the 14th century in the Royal Gardens of Charles V at Louvre, France.

On this side of the Atlantic, wild strawberries were growing in Massachusetts Colony when the settlers landed there. By 1843 instructions on how to grow strawberries were being published in most agricultural journals of the day.

Cultivation gradually moved to the South and West. Around the turn of the century, a thriving industry in winter berry production sprang up in Florida. But in California the commercial berry business didn't get started in a big way until after World War II.

It's a different story in California today. Half of the Nation's 500-million-pound crop is grown in the Golden State's strawberry basket of the Santa Clara Valley and the Monterey Bay area. Other prominent California areas include Santa Maria, Orange, San Diego, and Los Angeles counties, the Oxnard District and the San Joaquin Valley.

California, Florida, Michigan, and Louisiana are the largest producers of berries for the fresh market. Strawberries for processing come mostly from California, Oregon, Michigan and Washington.

Production was up 5 percent from 1970 and the crop value grew by 9 percent to \$116 million. However, the 1972 crop is expected to total only 4.4 million cwt.—down 14 percent from 1971. A combination of bad weather, labor problems, and increased foreign imports put a damper on both crops and acreage, primarily in California.

The U.S. is first in strawberry production, with roughly a fourth of the world's annual crop, followed by Japan and Mexico.

Canada usually takes about three-quarters of U.S. fresh strawberry exports, worth \$2.1 million in 1971.

Other top buyers are Sweden, West Germany, Switzerland, the United Kingdom, and France.

Most shipments to Europe go by air. Red-ripe American berries can be found on European tables in a matter of hours after being picked in sunny California. (19)

Milk Favorites Shift; Total Sales Go Up

Thanks to climbing sales of lowfat and skim milk, of sour cream and eggnog, sales of fluid milk products advanced 1 percent last year over 1970.

The 11-percent gain in lowfat and skim milk sales and the surprising increase in heavy cream sales—after years of decline—more than offset decreases of 1½ percent for fluid whole milk and 6 percent for cream mixtures such as half and half.

Lowfat and skim milk set a record in per capita consumption last year, with the average American drinking about 29 quarts, more than four times the amount he drank in 1950. Lowfat milk with 2-percent butterfat made the largest gain.

While the surge in lowfat and skim milk sales is probably attributable to increased weightwatching, an ERS dairy specialist attributes sour cream's rise to promotion. A fairly profitable item, sour cream has enough of a profit margin to justify publicity. Among its assets are its convenience, popularity in dips and dressings, and the fact it has less fat than butter and is often used in place of butter, such as on baked potatoes.

In all, customers bought 59.2 billion pounds of fluid milk items on a product weight basis.

Over the past 2 decades, we've greatly changed our milk-drinking habits, buying more lowfat and skim milk, less cream, and in recent years, less whole milk. Per capita use of cream is half what it was in 1950, and consumption of fluid whole milk has gone down from a peak of 290 pounds in 1955 to 223 pounds in 1970. (18)



According to a popular song of the 1950's, most Southerners have a yearning for catfish. But a survey of household panel families in four cities conducted by USDA suggests it's just another fish story.

The survey, taken in Peoria, Ill., Albany, Calif., New Orleans, La., and Philadelphia, Pa., found the people in the Peoria panel preferred catfish to any other type of freshwater fish. New Orleans panel families on the other hand, rated catfish as their second choice after trout. In Albany and Philadelphia catfish hardly got a nibble in the popularity poll.

In all cities the most favored fish—in order of preference—were freshwater trout, catfish, saltwater salmon, flounder, red snapper, freshwater perch, saltwater sole, tuna, and freshwater bass.

A 1-2-pound catfish was the most popular eating size, the smaller ones for those who liked to have their fish served whole and the larger size for the consumer who preferred fillets. In the eastern and western cities, catfish was usually eaten at home. In the other cities nearly half of those interviewed said they ate their catfish in restaurants.

Most of the respondents in Peoria and New Orleans had eaten catfish at some time during their lives—many during the previous year. About half the Bay Area respondents had tasted catfish at one time or another, but only a third of Philadelphians had ever eaten any.

The most frequently mentioned bone of contention about catfish had to do with its poor flavor, usually described as "caught in bad water," or "tasted oily." The majority of respondents unfamiliar with catfish thought sales would improve if the fish's name were changed. (20)

Melons Make Hot Seller, But One Has Weight Woes

David Livingstone reported from central Africa that watermelons were growing wild . . . Marco Polo wrote of delicious melons of the East . . . and Christopher Columbus took the trouble to carry cantaloup seeds to the New World.

This appreciation of the tasty melon has been handed down to our generation. The farm value of watermelons and cantaloups combined was \$163 million last year, and was exceeded only by lettuce and tomatoes, the two leading vegetable crops.

Cantaloups accounted for half of all melon sales. They also merited the most research—as scientists aim toward higher quality and more disease resistance—and they've even managed to gain slightly in per capita consumption in an era when fresh vegetable use has been going down.

The story's not quite the same with watermelons. Though they add up to 40 percent of melon sales, they've been fighting a losing battle in per capita consumption figures.

One of the reasons is the watermelon's very size. Today's smaller family can't eat a large melon at one sitting, and doesn't like it filling up the refrigerator for a week.

That's why most of the watermelon research is aimed at producing smaller, high-quality melons that have "shippability." The goal is to breed 10 to 12-pound melons that are uniform enough in size to be packed four to a carton.

While the lion's share of cantaloups is grown in three States—California, Texas, and Arizona—watermelons are grown in a wider range of States due to their greater tolerance of high humidities.

Florida is the top watermelon State, followed by Texas, Georgia, and South Carolina. Altogether, 16 States commercially produce watermelons.

Honeydew melons had \$13 million in sales last year—less than a tenth of total melon sales. (21)

Put a steer in a feedlot for 4 months, and he can be expected to gain at least 300 pounds. As for the feedlot operator, his financial gain is less certain.

The operator is caught between changing price levels for feeder steers and slaughter steers. Moreover, he must contend with fluctuating grain prices. These elements produce highly variable returns.

The table at the top of page 16 shows selected costs, gross margins, and net returns for a typical Texas feedlot operator whose steers ultimately are retailed in Los Angeles.

In February 1972, the operator had fairly large net earnings. In March, however, he lost money—over \$6 per head.

The March transaction shown on the table actually begins in November, when the feedlot owner buys a 700-pound steer calf, paying the average price for 550-750-pound Choice steers on the Amarillo market. At \$37.75 per cwt., the steer costs \$264.25.

After a 120-day feeding period, the feeder sells the 1,020-pound animal directly to a packer. The feeder and packer bargain to obtain the selling price. The price agreed upon is represented here by the current Texas-New Mexico price for Choice 900-1100-pound steers with the feeder responsible for transportation and shrink. The steer sells for \$34.10 per cwt., so if the feeder did not bear the associated costs, he would gross \$347.82.

From the base selling price, the feeder is assumed to be responsible for the cost of transportation and shrink—loss of weight during shipping. In what's known as "pencil shrink" the feeder is assessed 4 percent of the selling price.

The feeder's "gross" selling price (\$347.82) less transportation (\$2.50), pencil shrink (\$13.91), and the cost of the feeder steer (\$264.65) leaves the feedlot operator a gross margin of \$67.16.

To determine the feeder's estimated net return, production costs must be deducted from his gross

THE CATTLE FEEDER'S LOT-MIXED RETURNS



margin. Production costs vary widely, one cause of variation being current grain sorghum prices. On large Texas feedlots, the costs average about 23¢ per pound of gain.

With the fed steer registering a 320-pound gain, production costs work out to roughly \$73.32. Once this is subtracted from the feeder's gross margin, his net return for March is negative: -\$6.16 per head.

The feeder is able to make up for a loss such as this during good months, like February, when fed steers brought a net return of \$33.97 per head. As the table shows, however, the feeders are not netting enormous returns.

Returns to feedlot operators in Iowa are no more stable than those in Texas. Table 2 shows selected prices and gross margins for Mis-

A TEXAS FEEDER'S COSTS AND RETURNS

	1970			1971			1972		
	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Dollars									
Return to feeder—sale value of 1020 lb. Choice steer (Tex.-N. Mex. Choice 900-1100 lb. price)	(28.18)	(27.00)	(27.47)	(31.65)	(33.88)	(34.62)	(35.12)	(36.00)	(34.10)
	287.44	275.40	280.19	322.83	345.58	353.12	358.22	367.20	347.82
Less expenses									
Transportation	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Pencil shrink	11.50	11.02	11.21	12.91	13.82	14.12	14.33	14.69	13.91
Cost of feeder steer (based on Amarillo prices, 4 mos. earlier)	219.94	219.94	213.50	234.50	236.25	250.25	241.50	245.00	264.25
	233.94	233.46	227.21	249.91	252.57	266.87	258.33	262.19	280.66
Gross margin to feeder	53.50	41.94	52.98	72.92	93.01	86.25	99.89	105.01	67.16
Less cost of production (varied by grain sorghum price, 2nd month of feeding period)	73.72	71.68	73.92	80.64	79.04	74.56	71.36	71.04	73.32
Estimated net return to feeder	−20.22	−29.74	−20.94	−7.72	13.97	11.69	28.53	33.97	−6.16

souri-raised steers that are fed in Iowa, slaughtered in Omaha, and consumed in New York.

Net returns, which ranged from \$58.14 per head in February 1972 to -\$52.49 in December 1970, were negative in 7 of the past 20 months.

The Iowa feeder's routine varies somewhat from that of his Texas counterpart. In the example shown for March 1972, the Iowa feeder buys a 650-pound steer in Kansas City for \$229.12 (\$35.25 per cwt.).

The feeder must pay to transport the steer to his Iowa feedlot. Though the fee varies with distance, the study assumed an average charge of \$1.90. After feeding the steer to 1,120 pounds, the feeder ships the animal to the Omaha, Nebr., terminal.

The steer shrinks 30 pounds.

At the Omaha terminal, the feeder sells the 1,090-pound steer to a packer - wholesaler for \$382.81 (\$35.12 per cwt.). From this price he must deduct the \$1.90 freight charge for shipment to Iowa, as well as the shipping charge from his lot to Omaha (approx. \$2.60). The feeder is also charged with terminal expenses (commission, yardage, feed at terminal, etc.) estimated at \$3.80.

After subtracting the cost of the feeder steer (\$229.12), as well as transportation and terminal expenses, the feeder is left with a gross margin of \$145.89.

As in Texas, production costs average 23¢ per pound of gain. But in Iowa, part of the cost hinges

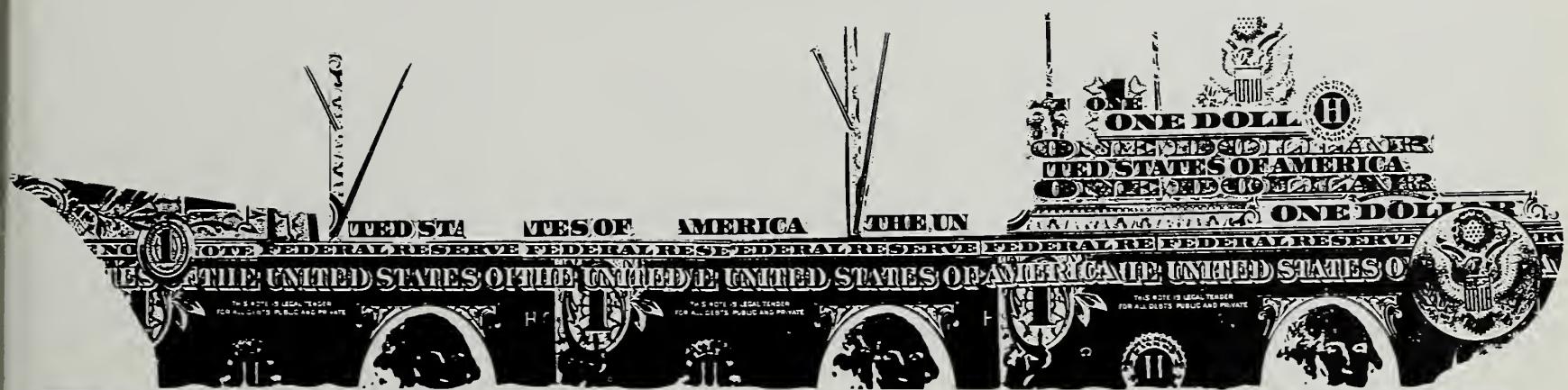
on corn rather than grain sorghum prices. Total production costs are considerably higher in the selected Iowa operation, as the steers are fed to a heavier weight (1,120 pounds vs. 1,020 pounds in Texas).

In March, production costs are \$99.17—relatively low considering costs the previous summer hovered around \$120. After taking production costs from the gross margin, the feeder nets a substantial return—\$46.72 (\$145.89 less \$99.17).

Net returns to the Iowa feeder average out to around \$5 per head over the past 20 months. This is somewhat higher than the Texas operator's average return, but is partly necessary, since the Iowa feeder has a slower rate of turnover. (22)

A CORNBELT FEEDER'S COSTS AND RETURNS

	1970			1971			1972		
	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Dollars									
Return to feeder—sale value of 1090 lb. (1120 lb. before shrink) Choice steer (Omaha price)	(28.75)	(27.25)	(27.12)	(32.25)	(33.80)	(33.62)	(34.82)	(35.90)	(35.12)
	313.38	297.02	295.61	351.53	368.42	366.46	379.54	391.31	382.81
Less expenses									
Transportation to Omaha	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Terminal expenses (commission, yardage, feed, etc.)	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
Cost of feeder steer (based on Kansas City prices, 6 mos. earlier)	226.85 1.90	227.18 1.90	227.50 1.90	224.25 1.90	224.25 1.90	224.25 1.90	221.98 1.90	226.20 1.90	229.12 1.90
Transportation to feedlot									
	234.65	234.98	235.30	232.05	232.05	232.05	229.78	234.00	236.92
Gross margin to feeder	78.73	62.04	60.31	119.48	136.37	134.41	149.76	157.31	145.89
Less cost of production (varied by corn price, 3rd month of feeding period)	109.51	111.39	112.80	121.26	117.50	108.57	102.46	99.17	99.17
Estimated net return to feeder	−30.78	−49.35	−52.49	−1.78	18.87	25.84	47.30	58.14	46.72



DEVALUATION: WILL IT HELP OUR FARM EXPORTS TO WEST EUROPE?

Devaluation itself would aid our farm sales abroad, yet there's a mix of factors to be weighed in assessing the overall outlook for exports to Western Europe.

The new package of currency changes—what's in it for our farm exports to Western Europe?

For many agricultural commodities, the impact will be favorable. For some others, the outlook holds many variables that could prove to be more crucial to export levels than the adjustments in exchange rates.

The recent currency realignments

were initiated by representatives of 10 leading industrial nations—the U.S., Canada, Japan, and seven in Western Europe.

The Smithsonian Agreement, as it's known, was signed this past December in Washington, D.C. It aims to facilitate world trade by adjusting exchange rates to realistic levels... and by loosening the link that binds the dollar to gold.

Probably the most significant result of this negotiation was the devaluation of the U.S. dollar by 8.57 percent. The U.S. adopted the downward adjustment on May 8, 1972,

when it notified the International Monetary Fund of the change.

The devaluation means Western Europe's currencies are now more valuable relative to the dollar than they were prior to May. Put another way, Europe's importers can buy more U.S. goods for a given unit of local currency. By the same token it takes more dollars than formerly—as much as 13 percent more in the case of West Germany and Switzerland—for us to buy things from Western Europe.

For U.S. fruits, nuts, and vegetables, the lower currency prices

should intensify the import demand abroad, say the trade specialists at ERS. That's especially true in the European countries outside the European Community (EC), where there are fewer trade barriers.

But for U.S. soybeans, the supply situation may override the currency changes as a key force behind sales. Assuming the U.S. supply improves this year, exports would increase because of strong demand by foreign livestock—particularly poultry—producers.

The direct effects of realignment of currencies on other major U.S. exports are difficult to assess. But again, other factors in addition to export prices will figure in the picture.

Our feed grain sales, for example, will be dampened by Europe's large 1971 harvest. Also the devaluation will be offset by the variable levies imposed for all grains by the EC.

For tobacco, market expansion could be discouraged by trade barriers, internal taxes, and anti-smoking campaigns abroad. On the positive side, U.S. tobacco blends are of high quality and would be difficult to replace in many manufacturing processes. Lower prices may provide an added incentive.

U.S. cotton and hides and skins are in relatively tight supply, so the higher prices in this country might be an offset to the currency changes.

ERS economists also report that some of the price advantages of exporting countries to the European Community have been offset by the EC system of compensatory levies. The purpose of these levies is to insulate the farm price levels in each EC country from the effects of the recent fluctuations in exchange rates.

The greater part of the compensatory levies was recently eliminated when the devaluation became official on May 8. Smaller compensatory levies, however, will continue to be applied to imports of farm products into Germany and the Benelux countries, until common prices have been re-established among EC members.

The first big move in recent history to adjust international exchange rates dates back to 1967. The United Kingdom then devalued the pound sterling to improve a serious deterioration in its balance of payments.

This action triggered devaluations in 13 other countries whose trade and currencies were closely tied to the U.K.'s. France also devalued, in 1969, following a general strike which immobilized 18 million workers and caused serious inflation. Thus the monetary problem continued through Western Europe. (23)

French Rice Use Swells With U.S. Promotion

If the average Frenchman is eating more rice than he did 5 years ago, it could well be because of a promotional campaign by the American Rice Council in cooperation with USDA's Foreign Agricultural Service.

In the fall of 1968, an advertising and sales promotion campaign for American long grain rice was begun in France. An ERS study estimates that in both 1968/69 and

EC Price Hikes

Farmers of European Community (EC) nations will receive higher prices for the 1972/73 marketing year as the result of a recent decision by the EC Council of Ministers.

The increased grain prices will mean a similar raise in minimum import prices facing U.S. exporters.

Hikes were approved for most agricultural commodities subject to price support. Farmers will receive a 4-percent increase for grain prices (5 percent for corn), 8 percent for milk, 4 percent for sugar, 3 percent for pork, and 5 percent for olive oil. Prices for oilseeds, tobacco and wine were also increased.

The proposals are close to prices submitted by the EC Commission in early February but they were well below increases previously demanded by EC farm organizations. (25)

1969/70, French consumers upped their use of rice by 3,500 metric tons, a 5.5-percent increase.

American parboiled rice accounted for more than half of the increase in total rice purchases of all types in 1968/69. Parboiled rice purchases climbed sharply in the second year of promotion also, but normally milled rice sales declined in that year.

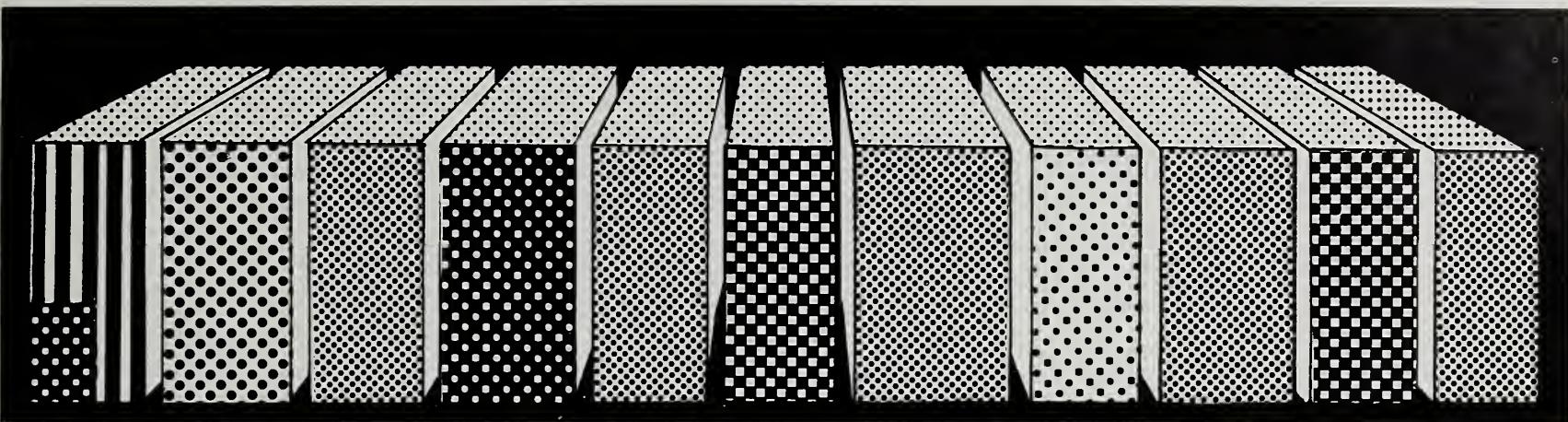
The campaign's goal was to expand the market for American long grain rice. Advertising set out to introduce rice as a vegetable to non-users and to promote it in nonsweet dishes as a complementary item on the menu. Advertising also was used to establish a quality label and greater identity for American rice.

ERS's study of the trade and consumer advertising's impact noted:

- All of the sales increases came from chain stores and cooperatives—sales in other stores remained about the same.
- Increased purchases came mostly from households where the wife was between 35 and 65.
- From 6 to 16 percent of the surveyed readers of the top six women's magazines recalled having seen the rice ads. Nearly two-thirds of these readers recalled the ads were for long grain rice, and a fourth recalled they were for American rice.

The study concluded the advertising campaign's major impact on sales was indirect, since the percentage of homemakers recalling the advertisements was relatively low. In addition, the response of younger housewives (under 35), to which the ads were primarily aimed, was below the average of other age groups. And of the recipes generated by the ads, most used were for desserts rather than vegetable dishes.

The study suggested alternative promotional strategies might be used, such as cooperative promotional campaigns with rice millers on a cost-sharing basis, or advertising allowances to millers and processors who are in fact promoting sales of American long grain rice. (24)



A COMPARISON: AGRICULTURE IN THE U.S. AND ENLARGED E.C.

	United States	1971	Enlarged European Community ¹	
PEOPLE/Formation of a 10-member European Community will create a consumer market one-quarter greater in population than the U.S., with a GDP that is about 60 percent of the United States. Agriculture's share of the work force and contribution to GDP is larger in the enlarged EC.	917 206 84 8.4 4.0 1.2 2.7	Land area Population Average annual employment Average annual employment in agriculture Agriculture's share of work force Workers per farm Agriculture's share of gross domestic product	million hectares ² millions millions millions percent number percent	185 259 105 10.5 10.0 1.8 5.2
FARMS/Grain-livestock farms generally characterize agriculture in the enlarged EC. Farm structure problems exist, but the U.K. and Denmark have comparatively good size farms. The average size farm in the U.S. is many times larger than the counterpart in the new Community.	2.9 157 61 133 51 19,000 2,700 3,330 68	Number of farms Average size of farm Crop area per farm Area per worker Crop area per worker Value of output per farm Value of exports per farm Food supply per capita Animal protein supply per capita	millions hectares hectares hectares hectares dollars dollars calories/day grams/day	6.0 17 10 9 5 8,600 1,900 3,100 52
OUTPUT/Agricultural production in quantity terms in the U.S. is considerably larger than the enlarged EC farm output. However, the expanded EC has greater output of certain commodities including barley, rye, potatoes, and milk. Output of pulses and fruits and nuts rank about even with ours. Aligning farm prices of the prospective members to the higher prices of original EC members should see significant increases in production of certain grain and livestock commodities. (26)	140.7 44.6 10.1 1.3 12.7 3.8 1.0 14.3 36.3 20.9 0.8 17.1 4.8 53.8 4.2	Corn Wheat Barley Rye Oats Rice, paddy Pulses Potatoes Oilseeds Fruits and nuts Tobacco Red meat, carcass weight Poultry Milk Eggs	million metric tons " " " " " " " " " " " " " " "	13.4 39.8 31.6 3.9 9.1 1.0 1.0 45.3 1.1 19.0 0.1 14.8 2.8 90.1 3.6

¹ The United Kingdom, Denmark, Norway and Ireland are expected to join the EC on January 1, 1973. Formal negotiations for acceptance of the four newcomers were concluded with the signing of accession treaties on January 22, 1972. Each prospective member must pass the necessary enabling legislation. Treaties have yet to be ratified by Norway and Denmark. ² 1 hectare = approximately 2.5 acres.

Brazil Reveals Plans To Lift Coffee Output

Failing to meet its International Coffee Organization (ICO) quota for 1971, Brazil has taken steps to regain the coffee production capacity that has slipped in recent years.

Brazilian officials are proposing to spend \$740 million by 1974 to encourage plantings of coffee trees.

Credit will be extended to nurseries to grow coffee seedlings, and to growers to finance tree plantings and purchase of fertilizers. The program attempts to add 600 million trees to the national inventory of 2.24 billion.

The program's objective is to raise Brazil's present annual average coffee production from 20 million bags (132 lbs. each) to 26-28 million bags. This level would be adequate to enable the country to hold its position in the world coffee market.

Coffee, Brazil's most vital export asset, earned an annual average of \$825 million during 1968-71 and is essential for continued economic development.

An exceptionally poor crop in 1970 made it necessary to draw heavily on stocks in 1970 and in 1971 to meet the ICO quota. A severe freeze hit the highly productive State of Parana and resulted in the lowest

yields in recent history.

Even so, the 1971 production rebounded 140 percent from the previous year to 23.6 million bags. This was insufficient to meet the export quota of nearly 18 million bags plus an additional 8.5 million bags for domestic use.

Since crops have not been sufficient to meet domestic and export demands, Brazil has been forced to dip into stocks to meet previous commitments. As a result, stocks have been considerably reduced.

Though the 1972 coffee crop is expected to be at least as good as 1971's, it would still be below the output of the early 1960's. (27)

Addresses of State experiment stations:

This ready reference list for readers wishing to order publications and source material published through State experiment stations will be updated again in December 1972.

STATE	CITY	ZIP CODE	STATE	CITY	ZIP CODE
ALABAMA	Auburn	36830	MONTANA	Bozeman	59715
ALASKA	College, U. of Alaska	99701	NEBRASKA	Lincoln	68503
ARIZONA	Tucson	85721	NEVADA	Reno	89507
ARKANSAS	Fayetteville	72701	NEW HAMPSHIRE	Durham	03824
CALIFORNIA	Berkeley	94720	NEW JERSEY	New Brunswick	08903
	U. of California Davis (217 Mrak Hall) (1018 Haring Hall)	95616		P.O. Box 231 Las Cruces (N.M. State University) (P.O. Box 3-AG)	88001
	Los Angeles	90024		Ithaca (Cornell Station)	14850
	Parlier	93648		Geneva (State Station)	14456
	Riverside	92502		NORTH CAROLINA	27607
	(Citrus Research Center)			Raleigh (Box 5847)	
COLORADO	Fort Collins	80521		Fargo (State University Station)	58102
CONNECTICUT	New Haven (P.O. Box 1106)	06504		Columbus	43210
	Storrs	06268		Wooster	44691
DELAWARE	Newark	19711		Stillwater	74074
FLORIDA	Gainesville	32601		Corvallis	97331
GEORGIA	Athens	30601		PENNSYLVANIA	16802
	Experiment	30212		University Park (106 Armsby Building)	
	Tifton	31794		Rio Piedras	00928
HAWAII	Honolulu, U. of Hawaii	96822		Kingston	02881
IDAHO	Moscow	83843		Clemson	29631
ILLINOIS	Urbana	61801		Brookings	57006
INDIANA	Lafayette	47907		Knoxville (P.O. Box 1071)	37901
IOWA	Ames	50010		College Station	77843
KANSAS	Manhattan	66502		Logan	84321
KENTUCKY	Lexington	40506		Burlington	05401
LOUISIANA	Baton Rouge	70803		Blacksburg	24061
	(Drawer E, University Station)			Pullman	99163
MAINE	Orono	04473		Morgantown	26503
	21 Coburn Hall			Madison	53706
MARYLAND	College Park	20742		Laramie	82070
MASSACHUSETTS	Amherst	01002		(University Station Box 3354)	99163
MICHIGAN	East Lansing	48823			
MINNESOTA	St. Paul Campus	55101			
MISSISSIPPI	State College	39762			
MISSOURI	Columbia	65201			

Recent Publications

THE AGRICULTURAL ECONOMY OF THAILAND. Omero Sabatini, Foreign Demand and Competition Division. ERS For. 321.

Thailand is one of the few developing countries which is both a sizable dollar market for U.S. farm products and a leading exporter of a number of agricultural commodities, particularly rice and corn. This report reviews the rapid expansion and diversification of Thailand's agricultural production and trade, and surveys prospects of its farm trade with the U.S. and the rest of the world as of mid-1971.

CONSUMERS' REACTION TO VARIOUS PEEL OIL LEVELS IN FROZEN CONCENTRATED ORANGE JUICE. Jon P. Weimer, Statistical Reporting Service. MRR 946.

Frozen concentrated orange juice products are usually packed with relatively low peel oil levels on the assumption that they are preferred. Little research, however, has been conducted on how the amount of peel oil affects consumer taste preference. This study was conducted to provide information on consumer reaction to frozen concentrated orange juice containing various levels of peel oil.

THE FORMULA FEED INDUSTRY, 1969. A STATISTICAL SUMMARY. Earl F. Hedges, George C. Allen, and Gary A. Davis, Farm Production Economics Division. Stat. Bull. No. 485.

Data presented in this summary include the number of formula feed establishments, physical output, methods of disposition, rated weekly capacity, and quantities of various ingredients used to manufacture poultry and livestock feeds in the United States.

CONTRACT PRODUCTION AND VERTICAL INTEGRATION IN FARMING, 1960 AND 1970. Ronald L. Mighell, Farm Production Economics Division, and William S. Hoofnagle, Marketing Economics Division. ERS 479.

The proportion of total farm pro-

The publications listed here are issued by the Economic Research Service and cooperatively by the State universities and colleges. Unless otherwise noted, reports listed here and under Sources are published by ERS. Single copies are available free from the Farm Index, OMS U.S. Department of Agriculture, Washington, D.C. 20250 State publications (descriptions below include name of experiment station or university of the title) may be obtained only by writing to the issuing agencies of the respective States.

duction under various forms of contracting and vertical integration increased from about 19 percent in 1960 to 22 percent in 1970. The analysis in this report suggests that aggregate changes in forms of vertical organization proceed slowly, even when noticeable changes occur in the production and marketing of individual commodities.

ARGENTINA: GROWTH POTENTIAL OF THE GRAIN AND LIVESTOCK SECTORS. John E. Hutchinson, Francis S. Urban, and John C. Dunmore, Foreign Demand and Competition Division, FAER No. 78.

In evaluating the probable production potential of Argentina's grain and livestock sectors by 1975, this report considers alternative price levels, resource availability, and possible technological innovations.

CATFISH PROCESSING—A RISING SOUTHERN INDUSTRY. Jesse R. Russell, Natural Resource Economics Division. AER No. 224.

This study describes the catfish processing industry in nine southern States in 1970, and attempts to determine factors affecting the economic operation of the 16 plants surveyed. The infant industry—only 3 of the 16 processors marketed any fish prior to 1968—is still experimenting with different processing and marketing methods.

FOOD MARKETING IN WEST GERMANY: DEVELOPMENTS, PROSPECTS FOR 1980, SIGNIFICANCE FOR U.S. EXPORTS. Norris T. Pritchard and W. Scott Steele, Foreign Demand and Competition Division; and William P. Huth, Foreign Agricultural Service.

West Germany's food market is an expanding, dynamic system. Its organization, development, and operation continue to be greatly affected by the same basic socioeconomic forces that are reshaping the economies of all industrial nations. They include population and income growth, suburbanization, automobiles, refrigerators, employment of women, and changes in patterns of daily living, food consumption, and shopping.

FARM AND NONFARM INVESTMENT IN COMMERCIAL BEEF BREEDING HERDS: INCENTIVES AND CONSEQUENCES OF THE TAX LAW. Virden L. Harrison and W. Fred Woods, Farm Production Economics Division. ERS 497.

Results of this study indicate that there is no economic incentive for nonfarm investments in commercial beef cow herds through management companies without the special provisions of capital gains and offsetting nonfarm income with farm losses.

EFFECTS OF ALTERNATIVE WHEAT AND FEED GRAIN PRICES ON OPTIMUM FARM PLANS AND INCOME: BEADLE, CLARK, CODINGTON, DAY, MARSHALL AND ROBERTS COUNTIES. Erwin O. Ullrich, Jr., and John T. Sanderson, South Dakota State University in cooperation with Farm Production Economics Division. SDSU Agr. Expt. Sta. Bull. 594.*

The general objectives of this research were to provide economic data needed by farmers to make profitable adjustments in their farming systems and production practices, and to develop research background for evaluating Government farm programs under varying assumptions.

DISTRIBUTION PATTERNS FOR U.S. RICE, 1969-70. J. C. Eiland and Theo. F. Moriak, Marketing Economics Division. ERS 484.

This report is one of a series on distribution patterns of milled rice in the U.S. and its territories. Reports on previous studies were published in 1959, 1964, and 1969. The series provides information on the changing economic structure of the rice industry and aids in research on efficient location patterns for rice marketing facilities and on international trade policies in rice.

USUAL PLANTING AND HARVESTING DATES. C. E. Burkhead, R. C. Max, R. B. Karnes, and E. Reid, Statistical Reporting Service. Agriculture Handbook No. 283.

Information on the usual planting and harvesting dates for major field and seed crops is the focus of this

report. Information is arranged by States for major crops and by commodity for selected major crops. The report revises one published in 1965.

IMPACT OF THE FOOD STAMP PROGRAM ON THREE LOCAL ECONOMIES: AN INPUT-OUTPUT ANALYSIS. Masao Matsumoto, Economic Development Division. ERS 503.

The objective of this study is to determine the direct and indirect effects of the Food Stamp Program on three local economies. To measure these effects, input-output analysis is used to describe the interdependence of economic activities within the study area.

LABOR PRODUCTIVITY IN APPLE PICKING. Marlen F. Miller, Pacific Lutheran University and Walter R. Butcher, Washington State University in cooperation with Washington

Agricultural Experiment Station. Wash. Agr. Expt. Sta. Bull. 752.*

The purpose of this study is to describe the workforce to harvest apples, workers' productivity and earnings, and to determine factors that affect picking rates and harvest costs.

COST OF STORING AND HANDLING COTTON AT PUBLIC STORAGE FACILITIES 1970-71, WITH PROJECTIONS FOR 1972-73. Whitman M. Chandler, Jr., and Joseph L. Ghetti, Marketing Economics Division. ERS 502.

This is the third in a series of studies to determine the cost of storing and handling cotton in public storage facilities. The data also forms an integral part of a broader study to determine optimum warehouse locations and cotton shipping patterns.

Article Sources

State publication indicated by (*) may be obtained only from the experiment station or university cited. Manuscripts and special material are usually available only on request to authors.

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2. C. Kerry Gee, FPED, and Forest McWilliams, Colorado State University, Cooperative Extension Service. Irrigated Pasture Costs and Production in the Golden Plains Area of Colorado (manuscript).
3. Dale L. Shaw and Charles A. Wilmot, MED. Cotton Gin Operating Costs In West Texas—1970-71 (manuscript).
4. George W. Coffman, Jr., FPED (special material); also, *Commerce News*, April 25, 1972, CB72-107.
5. Lawrence A. Jones, FPED (special material).
6. Van E. Eitel, FPED. "Real Estate Loans on America's Large Farms—Their Importance, Sources, and Uses" (speech at National Agricultural Credit Meeting, Chicago, Ill., March 1972).
7. Earl F. Hodges, George C. Allen, and Gary A. Davis, FPED. *The Formula Feed Industry, 1969, A Statistical Summary*, Stat. Bull. No. 485.
8. Denis Dunham, MED. *Marketing and Transportation Situation*, MTS 185, May 1972.
9. Herman W. Delvo and Glen J. Vollmar, FPED. "Effects of Alternative Use Practices on Optimum Organization of Nebraska Cash-Grain Farms," *Proceedings of the North Central Weed Control Conference*, Kansas City, Mo., December 1971.
10. David Y. Chen, Rueben C. Buse, and Sydney D. Staniforth, University of Wisconsin, and Rudolph A. Christiansen, NRED. A Planning Guide for Estimating Capital Requirements and Annual Operating Costs for Wisconsin Resorts (manuscript).
11. and 12. Donald D. Steward and Paul R. Myers, EDD. Housing, 1970: SMSA's and Non-SMSA's, Region and State (manuscript).
13. John A. Kuehn, Lloyd D. Bender, Bernal L. Green, EDD, and Herbert Hoover, NRED, formerly EDD. *Impact of Job Development on Poverty in Four Developing Areas*, AER No. 225.
14. David E. Brewster, ESAD (special material).
15. and 17. Frank R. Gomme, ESAD. "Buckwheat: A Look at Its Prospects and Problems," *Wheat Situation*, WS-220, May 1972.
16. Anthony G. Mathis, ESAD. *Dairy Situation*, DS-340, May 1972.
17. Ralph A. Freund, Jr., ESAD, *Fruit Situation*, TFS-182, February 1972; also Gilbert E. Sindelar, Foreign Agricultural Service (special material).
18. Elizabeth D. White, MED. The Market Potential For Catfish (manuscript).
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23. Don Phillips, FDCD (special material).
24. William P. Roenigk, FDCD (special material).
25. Sam Ruff, FDCD (special material).

NOTE: Unless otherwise indicated, authors are on the staff of the Economic Research Service (ERS) with their divisions designated as follows: Economic and Statistical Analysis Division (ESAD); Economic Development Division (EDD); Farm Production Economics Division (FPED); Foreign Demand and Competition Division (FDCD); Foreign Development Division (FDD); Marketing Economics Division (MED); and Natural Resource Economics Division (NRED).

Economic Trends

Item	Unit or Base Period	1967	1971			1972	
			Year	Apr.	Feb.	Mar.	Apr.
Prices:							
Prices received by farmers	1967=100	—	112	111	122	120	120
Crops	1967=100	—	108	108	111	107	112
Livestock and products	1967=100	—	116	114	131	129	125
Prices paid, interest, taxes and wage rates	1967=100	—	120	119	124	124	125
Family living items	1967=100	—	119	117	123	123	123
Production items	1967=100	—	115	115	118	119	119
Ratio ¹	1967=100	—	94	93	98	97	96
Wholesale prices, all commodities	1967=100	—	113.9	113.3	117.3	117.4	117.5
Industrial commodities	1967=100	—	114.0	113.3	116.5	116.9	117.3
Farm products	1967=100	—	112.9	113.0	120.7	119.7	119.1
Processed foods and feeds	1967=100	—	114.3	113.5	118.8	118.6	117.7
Consumer price index, all items	1967=100	—	121.3	120.2	123.8	124.0	124.3
Food	1967=100	—	118.4	117.8	122.2	122.4	122.4
Farm Food Market Basket: ²							
Retail cost	Dollars	1,081	1,244	1,237	1,297	1,292	1,283
Farm value	Dollars	419	477	472	515	501	498
Farm-retail spread	Dollars	662	767	765	782	791	785
Farmers' share of retail cost	Percent	39	38	38	40	39	39
Farm Income: ³							
Volume of farm marketings	1967	100	108	80	85	85	78
Cash receipts from farm marketings	Million dollars	42,693	51,633	3,360	3,763	3,808	3,500
Crops	Million dollars	18,434	21,875	918	1,169	1,047	900
Livestock and products	Million dollars	24,259	29,758	2,442	2,593	2,766	2,600
Realized gross income ⁴	Billion dollars	49.0	58.6	—	—	62.3	—
Farm production expenses ⁴	Billion dollars	34.8	42.9	—	—	44.0	—
Realized net income ⁴	Billion dollars	14.2	15.7	—	—	18.3	—
Agricultural Trade:							
Agricultural exports	Million dollars	—	7,695	632	715	669	628
Agricultural imports	Million dollars	—	5,825	554	591	507	486
Land Values:							
Average value per acre	1967 = 100	—	⁶ 205	—	—	—	⁶ 205
Total value of farm real estate	Billion dollars	—	⁶ 221.1	—	—	—	⁶ 221.1
Gross National Product: ⁴							
Consumption	Billion dollars	793.9	1,046.8	—	—	1,103.6	—
Investment	Billion dollars	492.1	662.1	—	—	691.8	—
Government expenditures	Billion dollars	116.6	151.6	—	—	168.3	—
Net exports	Billion dollars	180.1	233.0	—	—	249.6	—
	Billion dollars	5.2	.0	—	—	-6.2	—
Income and Spending: ⁵							
Personal income, annual rate	Billion dollars	629.3	857.0	843.0	901.8	905.6	909.7
Total retail sales, monthly rate	Million dollars	26,151	34,071	33,578	35,345	36,402	—
Retail sales of food group, monthly rate	Million dollars	5,759	7,437	7,431	7,665	7,741	—
Employment and Wages: ⁵							
Total civilian employment	Millions	74.4	79.1	78.7	⁷ 80.6	⁷ 81.2	⁷ 81.2
Agricultural	Millions	3.8	3.4	3.5	⁷ 3.4	⁷ 3.5	⁷ 3.3
Rate of unemployment	Percent	3.8	5.9	6.0	5.7	5.9	5.9
Workweek in manufacturing	Hours	40.6	39.9	39.5	40.1	40.3	40.5
Hourly earnings in manufacturing, unadjusted	Dollars	2.83	3.57	3.54	3.72	3.75	3.77
Industrial Production: ⁵							
Manufacturers' Shipments and Inventories: ⁵							
Total shipments, monthly rate	Million dollars	46,458	57,911	57,680	61,865	62,901	—
Total inventories, book value end of month	Million dollars	84,563	100,549	100,420	101,033	101,244	—
Total new orders, monthly rate	Million dollars	46,707	57,724	56,597	62,514	63,541	—

¹ Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. ² Average annual quantities of farm food products purchased by urban wage-earner and clerical worker households (including those of single workers living alone) in 1959-61—estimated monthly. ³ Annual and quarterly data are on 50-State basis. ⁴ Annual rates seasonally adjusted first quarter. ⁵ Seasonally adjusted. ⁶ As of November 1, 1971. ⁷ Beginning January 1972 data not strictly comparable with prior data because of adjustment to

1970 Census data.
Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Monthly Retail Trade Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

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